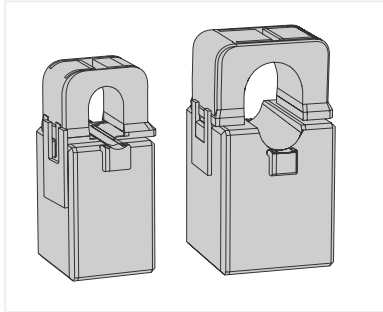


Current Transformer Features



Split-core current transformers are used to monitor AC current for various devices. The current transformer input takes a high voltage current input and produces a proportional low-voltage, low-current signal for measuring and monitoring. Split-core current transformers are ideal for installing onto existing electrical wiring because they can snap around the individual conductors without having to disconnect any cables.

These split-core current transformers are compatible with Banner's Condition Monitoring devices (CM1L or Q45CT Nodes, and the S15C-CT-MQ Converters).

Current Transformer Models

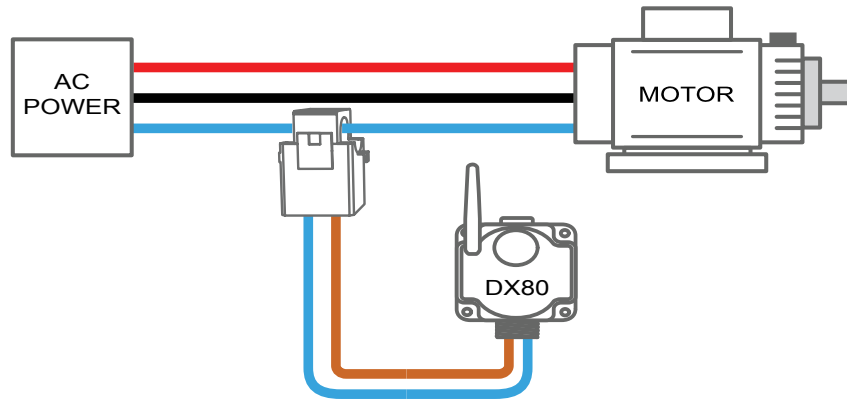
| Model Kits | Description | Connection |
|-------------------------------------|----------------------------------------------|-------------------------------------|
| BWA-CURRENT-TRANSFORMER-20A | Includes CT20A; 20 A Input; 0.333 V Output | 1 meter two-wire twisted pair cable |
| BWA-CURRENT-TRANSFORMER-150A | Includes CT150A; 150 A Input; 0.333 V Output | |
| BWA-CURRENT-TRANSFORMER-600A | Includes CT600A; 600 A Input; 0.333 V Output | |

Installing the Current Transformers

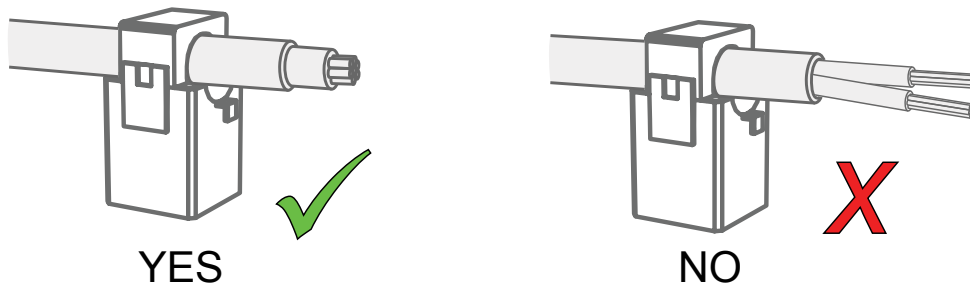
Observe the polarity when installing current transformers. Banner's current transformers indicate **k** as the source side and **l** as the load side, where source refers to the incoming power feed side to the device and the load side is the device side.

Banner's CTs have an etched arrow to indicate the directionality for installation (**k** -> **l**). As shown in Figure 1, the source is the AC power supply and the load is the Motor. The CT direction arrow must point toward the load. Banner's current transformers can be installed on any conductor in a 2- or 3-phase AC line. Current transformers should only be installed on a single conductor. For correct installation, see Figure 2.

Installing a current transformer relative to the power supply/motor

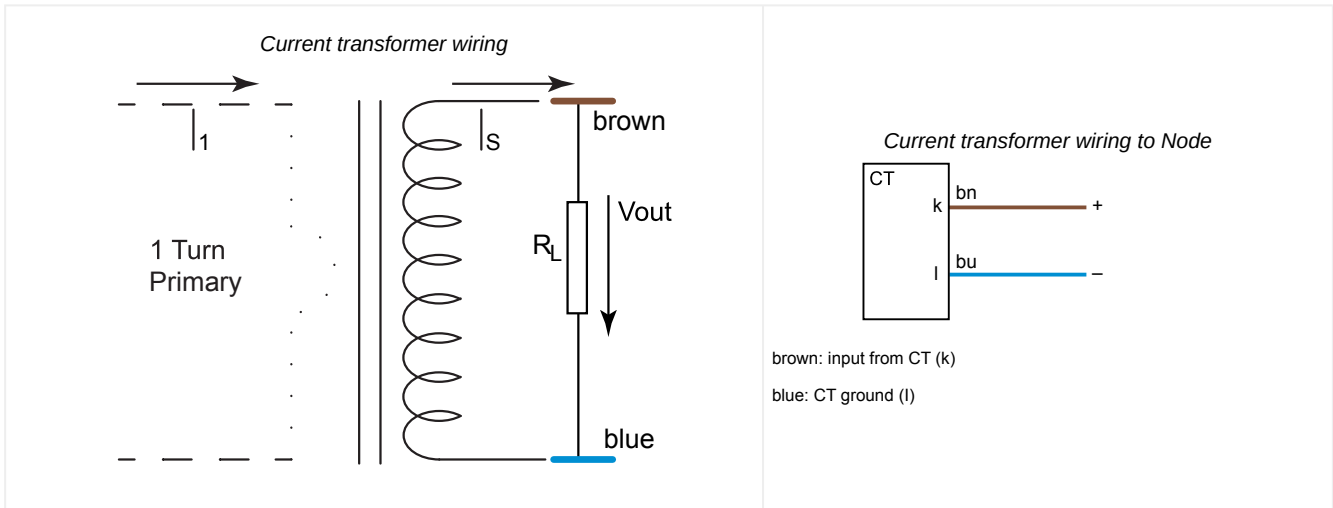


Installing a single conductor on the current transformer



Wire the Current Transformer

For more information on wiring and installing the current transformer, refer to the Split Core Current Transformer datasheet (p/n [212463](#)).



Current Transformer Specifications

Frequency

50 to 2000 Hz

Rating Input

CT20A: 0–20A

CT150A: 0–150A

CT600A: 0- 600A

Rated Output

0.333 V AC

Measuring Range

10% to 130% I_n

Ratio

$\leq \pm 1\%$

Phase Angle

$\leq \pm 60$ min

Dielectric Strength

2.5 kV / 1 mA / 1 min

Insulation Resistance

DC5000 V / 1000 MOhm min

Construction

PA /UL94-VO case; PBT bobbin; silicon steel core; epoxy internal structure; tie construction

Operating Conditions

-25 °C to +75 °C (-13 °F to +167 °F)

85% relative humidity

Accuracy Class

0.5

Certifications



Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM



Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN

| | Model | Diameter | A | B | C |
|--|--------|-------------------|-------------------|--------------------|-------------------|
| | CT20A | 10 mm (0.39 in) | 41 mm (1.61 in) | 24 mm (0.94 in) | 26.5 mm (1.04 in) |
| | CT150A | 16 mm (0.63 in) | 45.5 mm (1.79 in) | 29 (1.14 in) | 31.5 mm (1.24 in) |
| | CT600A | 35.7 mm (1.41 in) | 92.9 mm (3.66 in) | 65.25 mm (2.57 in) | 42 mm (1.65 in) |

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Document title: Current Transformer (Split Core)

Part number: 212463

Revision: C

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212463